

What is cryptosporidiosis?

Cryptosporidiosis (also referred to as “Crypto”) is a diarrheal disease caused by a microscopic, single-celled parasite called *Cryptosporidium parvum*.

Who gets cryptosporidiosis?

Anyone can get cryptosporidiosis, but it may be more common in persons under two years of age, those who travel, work with animals, or are in close personal contact with infected individuals. People with weakened immune systems, such as people with HIV infection or receiving chemotherapy, are more susceptible to the disease. *Cryptosporidium parvum* has also been responsible for disease outbreaks in children and staff in daycare centers.

Where is this parasite found?

Cryptosporidium parvum is found world-wide, including the United States. It typically infects the small intestine of humans and animals. When a person or animal is infected, the parasite reproduces and forms microscopic egg-like structures (oocysts) that are passed in the stool of infected people or animals. These are shed with the onset of symptoms. Any dog, cat, farm animal or wild animal, including birds, fish, and reptiles, can become infected, though calves are the most likely animals to be infected. Human sewage is treated to remove disease-causing organisms. Fecal matter from infected animals can be present in the soil or washed into streams and lakes. The oocysts can survive six months or more in water, and are very resistant to disinfectants. The oocysts can contaminate surface waters used for drinking water, irrigation, or recreation.

How is cryptosporidiosis spread?

The parasite is found in the intestines of infected humans and animals and is shed in the stool. People or animals become infected after swallowing the parasite when eating contaminated food, drinking contaminated water, handling objects contaminated with fecal matter, or after coming into contact with stools of people or animals that are infected. Unwashed hands can then transfer the parasite to the mouth, infecting the person. Persons can also be infected by ingesting contaminated recreational water while swimming in streams, rivers, lakes, or swimming pools.

What are the symptoms of cryptosporidiosis?

The major symptoms of cryptosporidiosis are watery diarrhea and abdominal cramping. Vomiting and low-grade fever may occur. Symptoms can last one to two weeks. It is possible for people to be infected with *Cryptosporidium parvum* and not have any symptoms of the disease. In persons with weakened immune systems, cryptosporidiosis can cause severe, life-threatening diarrhea and has been associated with respiratory and gall bladder disease. Persons at the greatest risk for severe illness include those with HIV infection, those receiving cancer chemotherapy, or those who are taking drugs that suppress the immune system.

How soon after exposure do symptoms appear?

Symptoms usually develop two to ten days after exposure, with an average of seven days.

How is cryptosporidiosis diagnosed?

Cryptosporidiosis is diagnosed by examining stool samples under the microscope or by using molecular tests (e.g., polymerase chain reaction (PCR)) in the laboratory.

What is the treatment for cryptosporidiosis?

People with healthy immune systems usually get well on their own without any medication. People with diarrhea need to be sure to drink plenty of fluids to prevent dehydration. Cryptosporidiosis is sometimes treated with an anti-parasitic drug. Your healthcare provider will determine whether treatment is necessary.

How can cryptosporidiosis be prevented?

- Avoid water or food that may be contaminated, including unpasteurized milk. Do not drink water directly from streams, lakes, springs or any unknown source. If you suspect your drinking water is unsafe, bring it to a rolling boil for one minute before using.
- Always wash hands with soap and water after using the toilet or changing diapers, before handling food, after handling manure from animals, especially from calves with diarrhea, and after gardening or other direct contact with soil.
- If you work in a child-care center where you change children's diapers, wash hands properly between each child. If you use gloves, change gloves between each child.
- If you take care of patients with cryptosporidiosis, wash hands after bathing patients, emptying bedpans, changing soiled linen, or otherwise coming in contact with the patient's stools.
- If you have cryptosporidiosis, wash your hands often to prevent spreading the disease to other members of your household.
- Persons with diarrhea should not use public swimming facilities.

Should infected people be excluded from school or work?

Because *Cryptosporidium* is passed in the stool, children and staff in daycare centers, health care workers, and people who handle food should not go to school or work while they have diarrhea. After diarrhea ends, persons may return to work or school, but they should carefully wash their hands after using the toilet. The parasite may still be passed in the stool for weeks after symptoms subside.

How can I get more information about cryptosporidiosis?

- If you have concerns about cryptosporidiosis, contact your healthcare provider.
- Call your local health department. A directory of local health departments is located at <http://www.vdh.virginia.gov/local-health-districts/>.
- Visit the Centers for Disease Control and Prevention website at <http://www.cdc.gov/parasites/crypto/>.